

# RIDOT TMC Incident Statistics 7/1/2011 To 9/30/2011

The Rhode Island transportation system serves 39 cities and towns, encompassing urban, suburban, and tourism areas. The Rhode Island Department of Transportation's Transportation Management Center (RIDOT TMC) has been addressing the problem of increasing congestion in Rhode Island by informing the traveler of crashes and unusual delays. In doing so, the TMC has provided measurable benefits to the transportation system, and has developed the technology and institutional awareness necessary to expand the Intelligent Transportation Systems (ITS) Program (called RhodeWays) to the benefit of Rhode Island travelers.

The RIDOT TMC maintains detailed statistics on incidents that we manage from our center. Because the data are entered by our TMC Operators, the statistics are dependent on what we can observe on the roadways with our equipment. Review and compilation of these statistics is done quarterly. By making these statistics available to you, we hope that you can learn more about the program and understand the benefit of the services we provide to the Rhode Island motoring public.

The types of incidents tabulated in this report include disabled vehicles, debris on the roadway, emergency roadwork, vehicle accidents, and vehicle rollovers. Additionally, a category exists for congestion delays that are outside of typical recurring congestion. The TMC does assist in information dissemination for planned events (such as construction) as well, but those types of events are not included in the statistics. Also, abandoned vehicles are not included since they tend to skew the statistics.

NOTE: After reviewing the data collection process, the RIDOT TMC has decided that the Incident Recovery Time statistic is too subjective and difficult to accurately track. Further, the terms "Incident Clearance" and "Roadway Clearance" have been standardized by FHWA and were inconsistent with our reporting. Beginning with this report, we have modified the data collection process and the way we present the data to better conform with FHWA and industry best practices.

We hope you find this report interesting and that it helps in understanding the significant benefit that the RhodeWays program provides to the people who travel Rhode Island's roadways every day. Also, please remember to check the TMC website frequently for updates (http://www.tmc.state.ri.us), including construction and incident information.

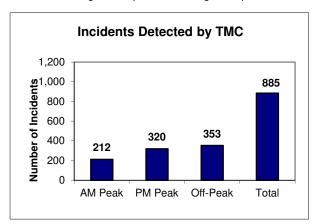
### **RIDOT TMC Incident Statistics Report**

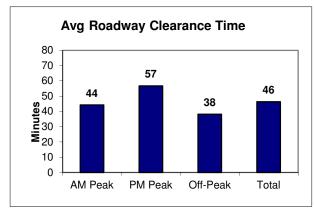
#### 1. Peak Period Incident Statistics\*

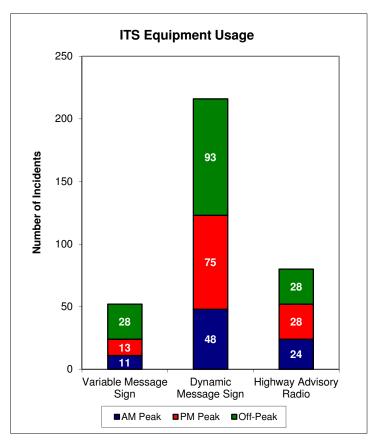
	AM Peak	PM Peak	Off-Peak	Total
Number of Incidents	215	329	364	908
Avg. Incident Clearance Time (min)	45	57	39	47
Avg. Roadway Clearance Time (min)	44	57	38	46
# Detected by TMC Operators (CCVE)	92	69	106	267
# Detected by TMC, State Police	120	251	247	618
# Notified by RhodeWatchers	0	0	0	0
# Utilizing VMS	11	13	28	52
# Utilizing DMS	48	75	93	216
# Utilizing HAR	24	28	28	80
# Posted to Web	188	315	331	834
Avg. Delay Cost**	\$191,078	\$241,521	\$164,970	\$198,889
Total Delay Cost	\$41,081,742	\$79,460,522	\$60,049,050	\$180,591,315

<sup>\*</sup> AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

<sup>\*\*</sup> Delay Cost is a function of incident duration, volume on the roadway, delay per person, and cost per hour of delay for both commercial and personal vehicles. Average delay cost includes only incidents with a lane blockage and represents average cost per incident.







Note: Statistics in this report are only for incidents that the TMC reported or responded to during the quarter. They do not include all incidents that occurred on Rhode Island roadways.

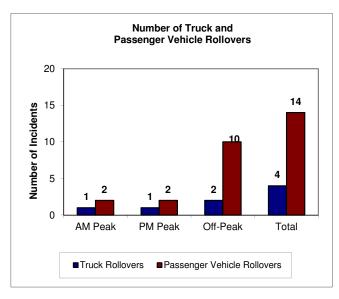
**Incident Clearance Time** is the time from the start of an incident (or when it is detected) to the time when responders leave the scene and/or the incident is declared as cleared.

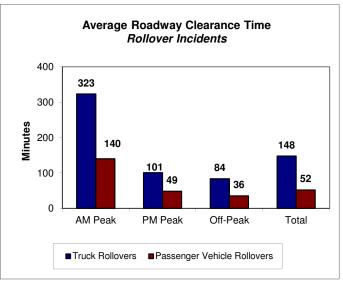
**Roadway Clearance Time** is the time from the start of an incident (or when it is detected) to the time when all travel lanes are available for traffic.

#### 2. Rollover Incident Statistics\*

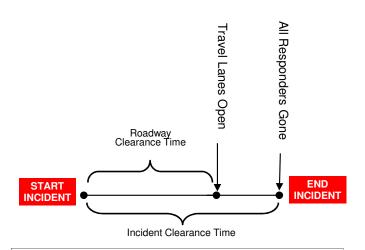
	Trucks			Automobiles				
			Off-		AM	PM	Off-	
VEHICLES	AM Peak	PM Peak	Peak	Total	Peak	Peak	Peak	Total
No. of Rollovers	1	1	2	4	2	2	10	14
Avg. Incident Clearance (min)	330	101	84	150	140	49	36	52
Avg. Roadway Clearance (min)	323	101	84	148	140	49	36	52

<sup>\*</sup> AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday





		Number
	Exit	Of
Roadway	Number	Rollovers
Interstate 295 Northbound	6	1
Interstate 295 Northbound	11	1
Interstate 295 Northbound	9B	1
Interstate 295 Southbound	10	1
Interstate 95 Northbound	18	1
Interstate 95 Northbound	N/A	1
Interstate 95 Northbound	20	1
Interstate 95 Northbound	11	1
Route 004 Southbound	6	1
Route 006 Eastbound	N/A	1
Route 006 Westbound	N/A	1
Route 010 Northbound	N/A	1
Route 037 Westbound	4B	1
Route 099 Northbound	N/A	1
Route 146 Northbound	N/A	2
Route 146 Southbound	N/A	2
	TOTAL	18



NOTE: After reviewing the RhodeWays data collection process, the RIDOT TMC has determined that the Incident Recovery Time statistic is too subjective and difficult to accurately track. Therefore, the data collection procedure has been modified starting in July 2011, as illustrated in the new diagram above. The terms "Incident Clearance" and "Roadway Clearance" have been standardized by FHWA and better conform with industry best practices.

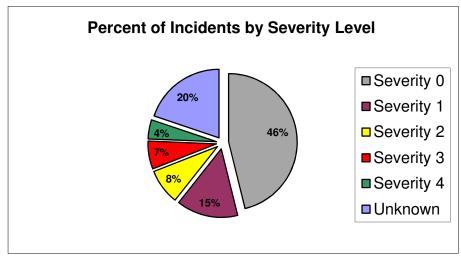
#### 3. Incidents by Severity Level

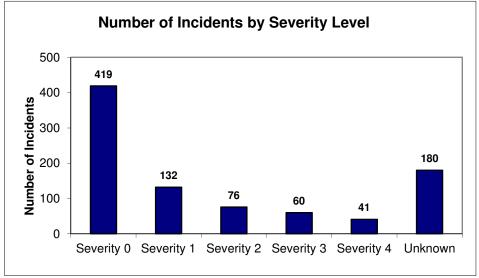
Severity Level*	No. of Incidents
Severity 0	419
Severity 1	132
Severity 2	76
Severity 3	60
Severity 4	41
Unknown	180
Total	908

Number of Incident	ts with a Secondary
Incident:	6

Percentage of Incidents with a Secondary Incident: 0.66%

Note: A "secondary" incident is one that is the result of an earlier incident.





#### \*Definition of Incident Severity Levels:

Severity 0: No injuries and no travel lanes blocked

Severity 1: 1/4+ travel lanes blocked with no injuries OR median/shoulder closed with injuries

Severity 2: 1/3 or 2/4+ lanes blocked OR Fire w/ 0 lanes closed OR hazardous materials (HAZMAT) w/ 0 lanes closed

Severity 3: 1/2 or 2/3 or 3/4+ lanes blocked OR Fire w/ 1/3 or 2/4 lanes closed OR

Hazmat w/ 2/4 lanes closed

Severity 4: All travel lanes blocked OR fatality OR Hazmat w/ clean-up OR Fire w/ 1/2, 2/3, 3/4 lanes closed OR Structural damage w/ 1/3, 2/3+ lanes closed

Unknown: Incidents without a recorded severity level

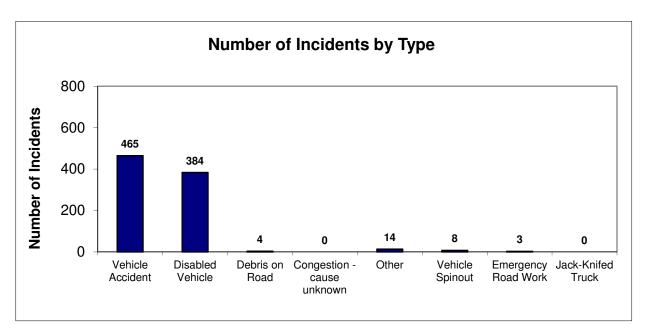
Note: For travel lanes blocked terminology, "1/4" indicates 1 out of 4 lanes blocked

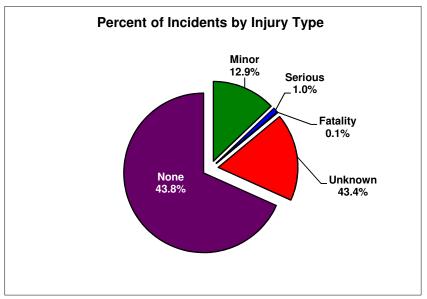
# 4. Incidents by Type

Incident Type	No. of Incidents
Vehicle Accident	465
Disabled Vehicle	384
Debris on Road	4
Congestion - cause unknown	0
Other	14
Vehicle Spinout	8
Emergency Road Work	3
Jack-Knifed Truck	0
Total Number of Incidents	878

# 5. Incidents by Injury Type

Injury Type	No. of Incidents
Minor	117
Serious	9
Fatality	1
Unknown	161
None	620
Total	908





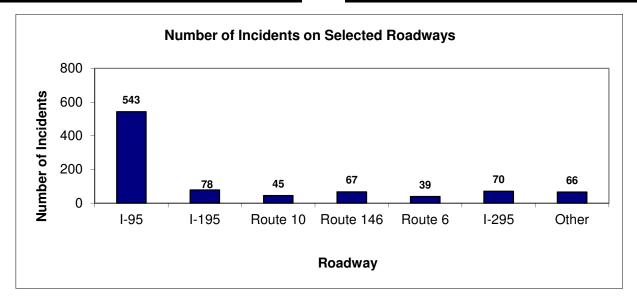
# 6. Incidents by Pavement and Weather Conditions

Pavement Condition	No. of Incidents
Dry	726
Wet	182
lcy	0
Snow-Covered	0
Flooded	0
Other	0
Total	908
Precipitation	
None	758
Light-moderate rain falling	142
Heavy rain falling	8
Light-moderate sleet falling	0
Heavy sleet falling	0
Light-moderate snow falling	0
Heavy snow falling	0
Total	908
Wind	
Calm to Moderate	897
Moderate to Strong	10
Gusts over 50 mph	1
Gusts over 75 mph	0
Hurricane	0
Other	0
N/A	0
Total	908
Visibility	
Clear	780
Light fog	10
Dense fog	0
Reduced- rain	111
Reduced-snow	0
Poor-heavy rain/sleet	1
Poor-heavy snow	0
Reduced-smoke	0
Other	3
N/A	3
Total	908

# 7. Incidents Detected by Primary Notifier on Selected Roadways

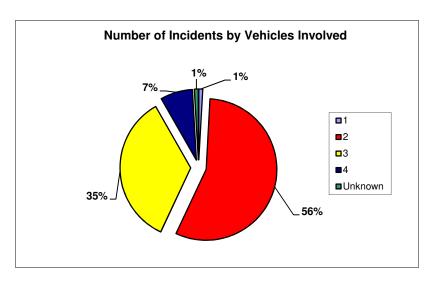
Roadway	Primary Notifier	No. of Incidents
I-195	TMC Operator	23
	State Police Scanner	51
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	4
	Total	78
I-95	TMC Operator	175
	State Police Scanner	326
	Local Fire Department	2
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	1
	Other	39
	Total	543
I-295	TMC Operator	20
	State Police Scanner	45
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	5
	Total	70

Roadway	Primary Notifier	No. of Incidents
Route 10	TMC Operator	14
	State Police Scanner	26
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	5
	Total	45
Route 146	TMC Operator	11
	State Police Scanner	48
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	8
	Total	67
Route 6	TMC Operator	9
	State Police Scanner	27
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	3
	Total	39



# 8. Incidents by Number of Vehicles Involved

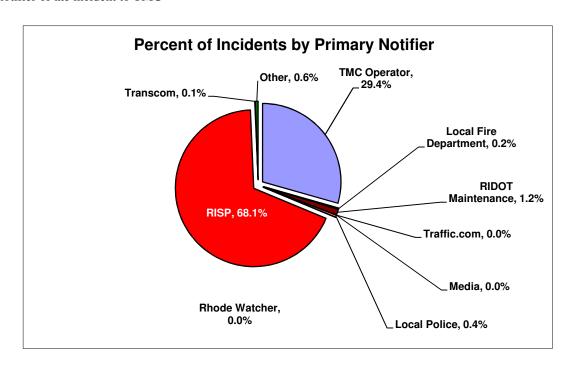
No. of Vehicles Involved	No. of Incidents
1	8
2	502
3	311
4	66
5	9
6	3
7	0
8	1
9	0
10+	0
Unknown	8
Total Incidents	908

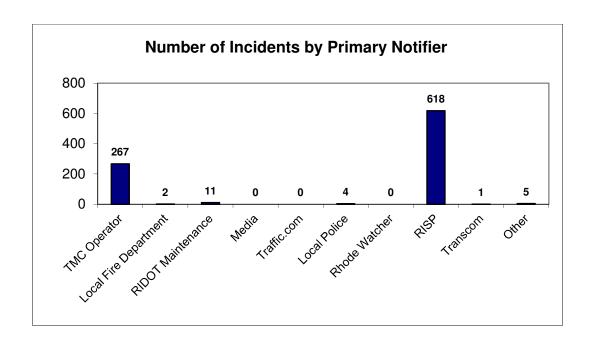


# 9. Incident Notification

Primary Notifier*	No. of Incidents
TMC Operator	267
Local Fire Department	2
RIDOT Maintenance	11
Media	0
Traffic.com	0
Local Police	4
Rhode Watcher	0
RISP	618
Transcom	1
Other	5
Total	908

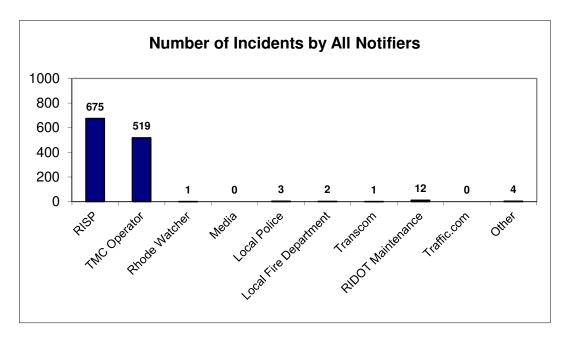
<sup>\*</sup>First notifier of the incident to TMC





Notifier	No. of Incidents
RISP	675
TMC Operator	519
Rhode Watcher	1
Media	0
Local Police	3
Local Fire Department	2
Transcom	1
RIDOT Maintenance	12
Traffic.com	0
Other	4

Note: Primary notifier indicates the first notifier of the incident to the TMC.
Additional notifiers are also logged, and are represented in the statistics for "all notifiers".



#### 10. Incident Response

On-Scene Responding Agency	No. of Incidents	Percent of Total Incidents
State Police	732	80.62%
Tow	263	28.96%
Local Fire Department	185	20.37%
EMS	163	17.95%
Local Police	45	4.96%
Service Patrol	17	1.87%
Mass Highway	2	0.22%
DOT	14	1.54%
Hazmat	3	0.33%
DEM	2	0.22%
Connecticut DOT	1	0.11%
Construction	0	0.00%
Coast Guard	0	0.00%
Department of Health	0	0.00%
K-9	0	0.00%
RIPTA	0	0.00%

	# of Incidents
# Utilizing Equipment (HAR,VMS or DMS)	256
# Utilizing VMS	52
# Utilizing DMS	216
# Utilizing HAR	80
# Posted to Web	834

Note: Numbers and percentages in upper table indicate how many of the incidents during the month were responded to by the agency indicated. Note that multiple agencies may respond to an incident, so percentages do not add up to 100%.

